P.O. Box 119
Gjoa Haven, NT X0E 1J0
Tel: (867) 360-6338
Fax: (867) 360-6369

kNK5 wmoEp5 vtmpq

NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI

EXPLORATION/ REMOTE CAMP SUPPLEMENTARY QUESTIONNAIRE

Applicant: _Sabina Resources Ltd._ **Licence No:** _____
(For NWB Use Only)

ADMINISTRATIVE INFORMATION

1. Environment Manager: _____ Tel: _____ Fax: _____ E-mail: _____

2. Project Manager: _Harvey Klatt_ Tel: _807 346 1668_ Fax: _807 345 0284_ E-mail: _hmklatt@usa.net_

3. Does the applicant hold the necessary property rights?

   Yes, though an agreement to acquire a 100% interest in the Hackett River Property from Teck Cominco Limited.

4. Is the applicant an 'operator' for another company (i.e., the holder of the property rights)? If so, please provide letter of authorization.

   Yes, Sabina is in the process of earning its interest and does not yet hold the property rights. The enclosed agreement between Sabina Resources Limited and Cominco Mining Partnership outlines the nature of the joint venture relationship. Note that the agreement is in the process of being amended to include Mineral Leases 2893, 2964, 3000 and 3018.

5. Duration of the Project
   [X] Annual
   [ ] Multi Year:
   If Multi-Year indicate proposed schedule of on site activities
   Start: _____ Completion: _____

CAMP CLASSIFICATION

6. Type of Camp
   [ ] Mobile (self-propelled)
   [ ] Temporary
   [X] Seasonally Occupied: _April 1 – September 30, 2004_
   [X] Permanent
   [ ] Other: _____

7. What are the design population of the camp and the maximum population expected on site at one time? What will be the fluctuations in personnel?

The camp is designed to accommodate 20 people with a maximum capacity of 25 people. It is expected that personnel will average 20 for the exploration season with occasional visitors or guests bringing the total up to 25 for short periods.

8. Provide history of the site if it has been used in the past.

The year that the present site was chosen for a camp is not known with certainty but it thought to be 1970 or 1971 based on personal conversations with Barbara Caelles, a Cominco project geologist on the Hackett Project from 1975 – 77. Cominco optioned the property in 1970 from Bathurst Norsemines and has had a continuing interest in the property since then. A field map showing the name "Camp Lake" dated April 1972 suggests that a camp was present near Camp Lake in 1971.

Between 1970 and 1975 Cominco carried out systematic exploration involving airborne and ground geophysics, geochemistry, mapping and drilling. In 1976 the property was surveyed and was brought to lease in 1977. Surface lease 76F 16-1-4 was established in 1977 to allow the construction of a permanent metal clad building to house and protect drill core.

In 1980 and 1981 detailed drilling continued on the "A" zone. Bathurst Norsemines was consolidated in 1986 and the company became Etruscan Enterprises Ltd.

In 1988 a precious metal evaluation by Cominco of wallrocks at the East Cleaver Lake (hangingwall and footwall) and Main Zone (hangingwall) deposits outlined significant Au and Ag zones.

In 1993 and 1994 Etruscan Enterprises Ltd conducted geophysical and drilling exploration programs.

During the month of September 1997 Etruscan Resources extensively up-graded camp facilities to accommodate geophysical crews arriving in October and diamond drilling crews in April of 1998. 1998 was the last year that the camp was used for exploration work.

CAMP LOCATION

9. Please describe proposed camp location in relation to biogeographical and geomorphological features, and water bodies.

The Hackett River area is underlain by generally NW – SE trending Archean metasediments and metavolcanics of the Yellowknife Group. The metavolcanics and metasediments are bounded by granite and similar felsic intrusives of Archean age. The supracrustal belt is up to 20 km wide and at least 40 km long. Metasediments consist of quartzite, greywacke, quartz-biotite schist, marble, calcareous quartzite and paragneiss derived from the metasediments. Intercalated within the metasediments are mafic to intermediate volcanic rocks as well as felsic volcanic rocks consisting of ash, tuff, rhyolite and chert. Numerous long sulfide gossans are present throughout the belt. Most are caused by weak sulfide mineralization consisting of pyrite and pyrrhotite. Locally mineral deposits containing pyrite, pyrrhotite, sphalerite with minor chalcopyrite, galena and tetrahedrite are present.

The climate, soils and vegetation of the camp area are arctic in character. Plant cover is characteristic of the Arctic Tundra community. Shrubs are found sparsely distributed on the mesic sites near the rivers

and lakes. On the interfluves are found low-growing perennials; grasses and sedges and some flowering species. The eskers support very little actual plant cover.

The camp is located on the western bank of Camp Lake which is close to the headwaters of Camp Creek, a small tributary that drains east to the Hackett River. Hackett River is part of the Burnside River basin which drains into Bathurst Inlet. An E-W trending esker system forms the southern edge of Camp Lake and is located approximately 150 m south of the existing camp. The camp is located on a gravel or sandy terrace adjacent to Camp Lake (see photo in section 4 of the Water License Application Form). The photo below shows the southern end of Camp Lake and some of the existing camp facilities in relation to the esker system. The camp structures are located near the transition from exposed bedrock to the terrace gravels.

2003 photo by Robert Carpenter, District Geologist, Nunavut.

10. How was the location of the camp selected? Was the site previously used? Was assistance from the Regional Inuit Association Land Manager sought? Include maps and/or aerial photographs.

How the location of the camp was selected is not known. Since the "A" Zone deposit lies on the northern margin of Camp Lake and Camp Lake is large enough to land a small airplane, it is thought that the camp was selected on the basis of closest proximity to the work site. The site has a history of intermittent exploration camp use since 1970. Assistance from the Kitikmeot Inuit Association Land Manager was not sought since the camp site was established prior to the establishment of Nunavut. Please refer to aerial photos referenced in question 9 above.

11. Is the camp or any aspect of the project located on:

[X] Crown Lands Permit Number (s)/Expiry Date: _Camp is on Surface Lease _76F 16-1-4 and Land Use Permit expected about March 22, 2004____

[ ] Commissioners Lands Permit Number (s)/Expiry Date: _____N/A_____

[X] Inuit Owned Lands Permit Number (s)/Expiry Date: Access permit applied for_

12. Closest Communities (distance in km):

The closest community is Bathurst Inlet located approximately 75 km to the NNE of the project. Kugluktuk is located approximately 400 km to the NW of the project.

13. Has the proponent notified and consulted the nearby communities and potentially interested parties about the proposed work?

Sabina Resources talked with Kingaunmiut Ltd of Bathurst Inlet about the proposed work program. Additional consultations are expected. Discussions were held with several individuals in Kugluktuk regarding the proposed work. Additional discussions with the community are expected.

14. Will the project have impacts on traditional water use areas used by the nearby communities? Will the project have impacts on local fish and wildlife habitats?

The project is expected to have no impact on traditional water use areas by nearby communities during the planned 2004 exploration season.

The project is expected to have no or minimal impact on local fish and wildlife habitat. Encounters with wildlife will be kept to a minimum through a policy of camp and work site cleanliness, no hunting or fishing from camp, and no feeding of the animals. Any work program at a site will be shut down or avoided in the event of the close approach of caribou or musk-ox. Hand-held air horns will be available to warn off bears and if necessary pepper spray will be used for self protection rather than firearms. If bear trouble develops an electric fence will be considered for camp security. Camp personnel will be encouraged to report wildlife encounters and record the location any critical wildlife habitat that may be discovered, such as dens or nesting or spawning sites so as to avoid them in the future.

Recommendations for the protection of wildlife made by Mathieu Dumond, Kitikmeot Wildlife Biologist as outlined in the attached letter will be observed.

PURPOSE OF THE CAMP

15. ⊙ Mining (Exploration)
○ Tourism (hunting, fishing, wildlife observation, adventure/expedition, etc.) (Omit questions # 16 to 21)
○ Other _____ (Omit questions # 16 to 22)

16. ○ Preliminary site visit
○ Prospecting

- ○ Geological mapping
- ⊙ Geophysical survey
- ⊙ Diamond drilling
- ○ Reverse circulation drilling
- ○ Evaluation Drilling/Bulk Sampling (also complete separate questionnaire)
- ○ Other: _____

17. Type of deposit:

- ⊙ Lead Zinc
- ○ Diamond
- ⊙ Gold
- ○ Uranium
- ⊙ Other: ___Ag-Cu_____

DRILLING INFORMATION

18. Drilling Activities

- Land Based drilling
- Drilling on ice (contingent upon receiving permit before melting)

19. Describe what will be done with drill cuttings?

Drill cuttings and sludge will be collected in a sump near the hole collar for holes drilled on land. If significant mineralization was intersected, casing would be left to mark the hole and the cuttings would be recontoured to the site profile. If no significant mineralization was intersected, casing would be pulled and the hole backfilled with the cuttings and recontoured.

For holes drilled on ice, or near a waterbody but on land, the drill return would be pumped to a sump located well back from shore. If any spilled, cuttings would be cleaned off the ice with a shovel and transported to the sump for disposal.

20. Describe what will be done with drill water?

Most of the water pumped to the drill site is not used for drilling and spills out of the surge tank and returns to the environment as surface run-off and percolation through the soil. Return from the drill collar would be via a settling sump before the decanted water would join surface run-off and percolate through the moss and soil. In both cases the water would in time likely rejoin the same small drainage basin that it was pumped from.

21. List the brand names and constituents of the drill additives to be used? Includes MSDS sheets and provide confirmation that the additives are non-toxic and biodegradable.

A list of the possible drill additives that may be required by Major Drilling are:

Brand Name	Constituent
Poly-Drill O.B.X.	Liquid Polymer
Poly-Drill 133-X	Liquid Anionic Polymer

Poly-Drill 1330	Liquid Anionic Polymer
Westcoast Drilling Supplies	Linseed Soap
Peladow	Calcium Chloride salt

MSDS sheets providing toxicological information about the above listed products are enclosed with the application.

Online MSDS information about the 3 Poly-Drill products are found at: www.poly-drill.com.

22. Will any core testing be done on site? Describe.

Drilled core will be logged and any intervals of potential economic interest will be sampled by sawing the core in half. Half of the core will remain in the core box as a geologic record and the other half will be bagged and shipped to a laboratory for analysis.

SPILL CONTINGENCY PLANNING

23. Does the proponent have a spill contingency plan in place? Please include for review.

Sabina Resources' spill contingency plan is as follows:

Fuel Emergency Contingency Plans

Fire

In the event of a petroleum fire:

- Personal safety comes first make sure you are safe.
- Stay calm think.
- Remove any injured people to a safe site, generally upwind from the fire.
- If there is a danger of explosion get away!
- If possible, stop the flow of fuel feeding the fire.
- Remove on-going sources of ignition i.e., shut off the electricity.
- Call for assistance.
- Attempt to extinguish flames using approved equipment. Remember, diesel fuel and gasoline float. Don't wash flames to an area of higher danger.
- Remember the order of priority, human safety comes first, then property. Don't risk your life for possessions.
- If a person, who is splashed with fuel, catches fire, wrap him in a blanket or roll him on the ground to remove oxygen and extinguish the fire. If this doesn't work, use an ABC, dry chemical, fire extinguisher to put out the fire.

Leaks or Spills

In the event of a spill or leak:

- Stop the flow of fuel.
- Remove all sources of ignition. Be prepared to use a fire extinguisher.

Remember gas vapors flow down hill and are extremely explosive.

- Contain the spilled fuel by damming with earth or another suitable absorbent material. Don't wash the spilled fuel away into potentially higher risk areas. Protect water sources and septic systems.
- Work from the upwind side to avoid inhaling vapors and becoming engulfed in flames if a fire starts.
- Clean up and dispose of all fuel by shoveling the contaminated earth or absorbent material into metal containers. Dispose of contaminated cleanup materials in an approved manner.
- Ensure that all ignitable vapors are dispersed before resuming normal activities.
- It's a regulatory requirement that all spills and leaks of gasoline or diesel fuel must be reported to the Environmental Protection Branch. Any leak or spill of any amount into a watercourse, water body or groundwater must be reported.

Reporting Leaks and Spills

Contact: Environment Canada
Environmental Protection Branch, Northern Division
301 – 5204 50th Avenue
Yellowknife, NT X1A 1E2
Ph: (867) 669 – 4700
Fax: (867) 873 – 8185

Loss Prevention

Leak Containment

Leak containment requires the planned use of absorbent pads, drip buckets, drip pans, or impermeable geomembrane sheets to catch any slow or unexpected leaks. The use of these collection methods requires regular monitoring to ensure that the leak collection device is not exceeded.

Locations containing fuel drums (near generator, fuel supplied for tents, main fuel cache) will be equipped or fitted with absorbent pads, pans, buckets or impermeable geomembrane sheets to prevent the escape of fuel to the environment. A regular inspection program will be established to monitor the condition of the leak containment devices so they do not overflow.

Leak Prevention

Leaks most often occur during handling of the fuel but may also develop slowly over time. Fuel drums in any fuel cache will be inspected regularly for leaks.

Adequate worker training is required to avoid puncturing the fuel drums during handling. Fuel drum storage locations must be inspected for, and cleared of, puncture or tipping hazards. An impermeable geomembrane sheet will be put down before drums are stored at any fuel caches.

Workers will be trained in refueling techniques to prevent the spillage of fuel.

Propane tanks will be stored securely upright to prevent tipping and possible breakage.

Fire Prevention

No smoking signs and will be posted near to any fuel cache along with a dry chemical fire extinguisher. Fire extinguishers will also be located at each site where fuel is used. Workers will be trained in the use of the fire extinguisher and of electrical and open flame fire hazards near fuel.

The fuel cache will be located well away from camp buildings and water bodies and will be kept clean and free of litter. Each type of fuel will be stored in a separate cache.

Fuel Transfer Methods

Plans are to fly fuel (mostly diesel and jet fuel with minor gasoline) to the camp in 45 gallon drums and landing on the ice of Camp Lake (local name). Fuel drums would be rolled out of the airplane onto the ice surface using a ramp. A helicopter would be used to lift the drums off the ice and place them in the main fuel cache (separate caches for each fuel type).

Each diesel fuel consumption location (generator, drill, stoves) would be supplied from the fuel cache using a helicopter to move the fuel drums. The final adjustments to upright the fuel drum would be by hand. Diesel would be transferred from the upright fuel drum to a supply tank drum using a hand powered pump with an attached flexible hose. Gravity feed would be used to supply the generator, drill or stoves from the plumbed in supply tank drum.

Jet fuel would be transferred from the drum to the helicopter using a small 24 v electric motor powered from the helicopter.

Small gasoline water pump engines would be fueled from small (3 or 5 gallon) plastic fuel jugs fitted with a flexible plastic nozzle. The plastic fuel jugs would be fueled from a 45 gallon drum of gasoline using a hand powered wobble pump or crank pump.

Propane would be transferred using standard propane fittings, regulators and hoses.

24. How many spill kits will be on site and where will they be located?

A minimum total of 3 spill kits will be on site. Each of the 2 drill sites will be equipped with a spill kit as will the camp. A spare spill kit will be kept in camp as a back-up replacement.

25. Please describe the types, quantities, and method of storage of fuel and chemicals on site, and provide MSDS sheets.

The following list of fuels are expected to be used for the project.

Fuels		Number of containers	Capacity of containers
Diesel		1110	205 litre
Gasoline (lead free)		2	205 litre
Aviation Fuel (Jet B)		310	205 litre
Propane		12	100 lb

Drums of diesel, Jet B and gasoline fuels will be stored outside in separate fuel caches enclosed within geomembrane impermeable berms to prevent any leaks from entering the soil. The fuel caches would be stored well back from any lake or stream. As the fuel is used up the empty fuel drums will be stored

near camp until they can be flown out to Yellowknife on backhaul flights. All the fuel caches would be monitored on a regular basis to check for leaks. Propane tanks would be stored in an upright and secured position.

MSDS sheets for the above listed fuels are enclosed with the application. Online information for all of the above listed fuels are found at: https://services.shell.ca/llutilsp/searchMSDS/Search.do?lang=en

Lubricants expected to be used on the project would be stored in the machine/tool shed in camp or in the drill shack where they would be used. Chemical Lubricants expected to be used for the project include:

Product	Online MSDS information reference
Drill Rod Heavy Grease	www.online.petro-canada.ca/datasheets/en_CA/drodh.pdf
Duron Multigrade Engine Oil SAE Viscosity Grades 10W-30, 15W-40	www.online.petro-canada.ca/datasheets/en_CA/dur13.pdf

MSDS sheets for the above listed lubricants are enclosed with the application.

Other chemicals that would be used during the drill program would include kitchen soaps and cleaning agents, bleach, soaps and shampoo in the dry and mosquito repellant. Kitchen cleaners would be kept in the kitchen tent, bleach, soaps and shampoo would be stored in the dry. Mosquito repellant would be stored with office field supplies.

WATER SUPPLY AND TREATMENT

26. Describe the location of water sources.

Water for the camp would be supplied from Camp Lake. Water for the drills would be supplied from a variety of small lakes and ponds located on the Mineral Leases. Water for each drill site would most likely be from the closest body of water to the drill site so as to minimize pumping distance (see list of proposed drill sites in section 3 of the Water License Application).

27. Estimated demand (in L/day * person):

- Domestic Use: 150L/day/person Water Source: Camp Lake
- Drilling (2) Units: 130,500L/day* Water Source: (see sources listed under #26)
- Other: _____ Water Source: _____

*For drilling the actual amount of water used down the hole by the 2 drills is estimated to be 10.9 m^3 per day.

28. Describe water intake for camp operations? Is the water intake equipped with a mesh screen to prevent entrapment of fish? Describe:

The water intake for the pump used to supply water for the camp will be equipped with a footvalve to assist in priming the pump. A fine mesh screen will be wrapped around and secured to the footvalve assembly to prevent fish from entering the pump.

29. Will drinking water quality be monitored? What parameters will be analyzed and at what frequency?

No. The camp will be supplied with bottled water will flown in to provide drinking water. Once in camp water quality testing inquiries will be made to determine what parameters to test for, at what frequency and at what laboratory. If subsequent test results show that the water from Camp Lake meets drinking water standards then water from Camp Lake may be used for drinking purposes.

30. Will drinking water be treated? How?

Drinking water supplied from bottled water will not be treated. If the bottled water supply runs out then water from Camp Lake or snow will be melted and the water boiled to ensure safety.

31. Will water be stored on site?

Water would be stored at each drill and at the camp. At each drill a metal horse trough type surge tank (approximately 500 litre capacity) would be used. In camp water would be stored in 2 plastic tanks (of approximately 500 litre capacity) for domestic use and a metal horse trough type tank (approximately 500 litre capacity) would be used to hold water for occasional use with the rock saw. The total amount of water stored at any one time would be approximately 2.5 m^3.

WASTE TREATMENT AND DISPOSAL

32. Describe the characteristics, quantities, treatment and disposal methods for:
    - Camp Sewage (blackwater)

Backwater would be contained in plastic Pacto toilet bags and would be incinerated. It is estimated that two Pacto toilet bags (~5 kg) would be produced each day. Ashes and any unburned residue would be placed in metal drums and flown out to Yellowknife for disposal at the Yellowknife dump.

    - Camp Greywater

Grey-water generated from the kitchen, showers and laundry facilities would be collected in a holding tank. All cleaning agents would be biodegradable and phosphate free. On an as-needed basis the grey-water would be pumped to a suitable disposal sump location well back from Camp Lake (local name) and would be allowed to percolate though the moss and soil to rejoin groundwater. It is estimated that approximately 3 m^3 per day of grey-water would be generated by the camp.

- Solid Waste

The disposal method for burnable solid waste such as paper, cardboard, plastic, wood, burlap cloth, fuel or oil soaked absorbent material, semi-solid waste from Pacto toilets and food preparation waste would be by burning in an incinerator. It is estimated that on average approximately 4 garbage bags (121 litre capacity) of such burnable waste would be generated each day. Any remaining ashes and unburned residue would be flown out for disposal at the Yellowknife landfill site.

- Bulky Items/Scrap Metal

All large metal waste items such as used drill steel, broken or worn out mechanical parts and 205 litre (45 gallon) drums used for fuel transport would be flown back to Yellowknife for recycling or for disposal in the Yellowknife dump. Any bulky waste items would be cut up and burned in the incinerator or would be flown out for disposal at the Yellowknife landfill site. The quantity produced is estimated to be one Twin Otter plane load every other week, most of which would be empty fuel drums.

- Waste Oil/Hazardous Waste

Any waste motor oil, transmission fluid and other petroleum fluids would be transferred to plastic tubs or other sealable containers and either flown back to Yellowknife for recycling or disposal by the drilling contractor or incinerated (waste diesel only) in camp. It is estimated that in total approximately 100 litres of such waste petroleum fluids would be generated in the course of the exploration program.

No hazardous materials other than the fuels are expected to be stored or used on the property.

- Empty Barrels/Fuel Drums

As mentioned in the "Bulky Items/Scrap Metal" section, empty fuel drums would be stored near camp and flown to Yellowknife on backhaul flights. Care would be taken to ensure that the bungs are replaced and snugly tightened so as to prevent any fuel leakage.

- Other:

Drilling will result in the distribution of drill mud cuttings being deposited near the drill hole collar and in the sump. All drill hole additives are biodegradable. Where drilling occurs near or on lakes the drill return water containing drill cuttings will be pumped well back from the shore of the lake. Because drill cuttings are mechanically pulverized rock they are geologically similar to the locally present glacial till. It is expected that drill cuttings will, in time, be colonized by plants and lichen. The occasional use of salt at the drill site is expected to have minimal impact as any brine will be effectively diluted by water pumped to the drill site at a rate of approximately 12 gallons per minute. Salt is needed to prevent permafrost from freezing the hole shut when drilling is halted for a significant

length of time. Permafrost is not present under deeper lakes that don't freeze to the bottom. If drilling is successful in intersecting sulfide mineralization the resulting drill cuttings will have high acid rock drainage potential. This is a naturally occurring state within the soils developed above existing zones of sulfide mineralization on the property. The relatively small quantities of sulfide rich drill cuttings left at the surface are expected to be admixed with other rock type drill cuttings hence slowing the rate of reaction and providing possible buffering capacity. The quantity of drill cuttings at each drill site depends on the length of the hole and is estimated to be up to 1 m^3 for the deepest holes. At each drill site (except those drilled from ice) plans are to backfill the drill hole with any accumulated drill cuttings taking care not to disrupt the surrounding topsoil / organic layer.

The rock saw is expected to produce approximately 1/2 m^3 of sludge cleaned from the bottom of the settling container in the course of the season. The sludge will consist mostly of sulfides. The sludge will be cleaned from the settling container on an as needed basis, dried, placed in plastic sample bags and flown out to the Yellowknife dump for disposal.

---

33. Please describe incineration system if used on site. What types of wastes will be incinerated?

A forced air – diesel fueled incinerator system will be used on site. Burnable solid waste such as paper, cardboard, plastic, wood, burlap cloth, fuel or oil soaked absorbent material, semi-solid waste from Pacto toilets and food preparation waste would be disposed of by burning in the incinerator.

34. Where and how will non-combustible waste be disposed of ? If in a municipality in Nunavut, has authorization been granted?

Any remaining ashes and unburned residue from the incinerator would be flown out for disposal at the Yellowknife landfill site.

35. Describe location (relative to water bodies and camp facilities) dimensions and volume, and freeboard for sumps (if applicable).

Sumps for use at the various drill sites or at the camp will be located at least 31 m back from any body of water and in a location chosen to enhance infiltration and filtering of the drill return water or camp grey water. In camp the sump would be located to the west of the camp buildings, on the uphill side of camp, so as to maximize the distance between the sump and Camp Lake. Sumps would be chosen or constructed to have dimensions of approximately 0.38 x 2 x 2 m and would have approximately 1.5 m^3 capacity. The amount of freeboard would be monitored during use and if the sump was filling up a larger sump would be constructed to contain the excess.

36. Will leachate monitoring be done? What parameters will be sampled and analyzed, and at what frequency?

No leachate is expected to be developed at the site.

OPERATION AND MAINTENANCE

37. Have the water supply and waste treatment and disposal methods been used and proven in cold climate? What known O&M problems may occur? What contingency plans are in place?

Yes. Water supply system for the drills has been tested on prior work sites in Nunavut. If a coil stove water heater fails and the water lines freeze the frozen hose can be gathered up and thawed out in the drill shack. In camp, drinking supplies of water are provided in bottles flown to the camp. If the supply of bottled water runs out due to unexpected weather conditions snow can be melted and the water boiled to provide a safe drinkable water supply. Water pumped from Camp Lake to the camp for domestic use (showers, laundry, washing dishes, etc.) is via an insulation wrapped water hose to prevent freezing during use. A second similar pump will also be available in camp as a back-up. Water pumped from the lake is temporarily stored in tanks enclosed in heated tents to prevent freezing. All water supply pipes in camp are equipped with heat trace and insulation or are located entirely within heated tents to prevent freezing. A second generator will be located in camp as a back-up power supply in the event that on generator fails. Pacto type toilets will avoid the need for a water based sewage system. In the event that the incinerator fails, burnable waste including the Pacto bags can be burned in a metal drum with any unburned residue flown out to Yellowknife for disposal. Any needed repairs or maintenance can be quickly accessed by having a satellite telephone system in camp supplemented by a battery powered hand-held satellite telephone system to call for parts or assistance.

ABANDONMENT AND RESTORATION

38. Provide a detailed description of progressive and final abandonment and restoration activities at the site.

After each drill hole is completed any trash and litter is gathered up and transported back to camp for either burning or flying out to Yellowknife. Capped casing pipes are expected to be used to mark hole locations were significant mineralization was intersected. In holes where no significant mineralization was intersected, plans are to pull the casing and backfill the hole with drill cuttings and mark the hole with a wooden picket. Natural revegetation is expected to reclaim the drill sites.

At the close of the field season rented tents and equipment would be removed and flown back to Yellowknife for storage. The camp would be left in a clean and tidy state and the remaining camp structures would be secured for the winter as consistent with their use on Surface Lease 76F 16-1-4.

BASELINE DATA

39. Has or will any baseline information be collected as part of this project? Provide bibliography.

- ⊙ Physical Environment (Landscape and Terrain, Air, Water, etc.)
- ○ Biological Environment (Vegetation, Wildlife, Birds, Fish and Other Aquatic
- ○ Organisms, etc.)
- ○ Socio-Economic Environment (Archaeology, Land and Resources Use,
- ○ Demographics, Social and Culture Patterns, etc.)
- ○ Other:

The following two water quality baseline studies were conducted on the project area in 1974 and 1975.

Department of Indian and Northern Affairs, Water Management Section, Bathurst Norsemines (Hackett River), Potential Mine Water Quality Survey Network, Report Series, 1974 By: D. Sutherland, J. McLaren

Northwest Territories Water Board, Department of Indian and Northern Development, Bathurst Norsemines Hackett River, Potential Mine Water Quality Survey Network, Report Series, 1975 By D.J. Sutherland

A water quality baseline survey may be conducted in 2004 to provide more current baseline data.

REGULATORY INFORMATION

40. Do you have a copy of

- Article 13 - Nunavut Land Claims Agreement
- NWB - Water Licensing in Nunavut - Interim Procedures and Information Guide for Applicants
- NWB - Interim Rules of Practice and Procedure for Public Hearings
- NWTWB - Guidelines for the Discharge of Treated Municipal Wastewater in the NWT
- NWTWB - Guidelines for Contingency Planning
- DFO - Freshwater Intake End of Pipe Fish Screen Guideline
- Fisheries Act - s.35
- RWED - Environment Protection- Spill Contingency Regulations
- Canadian Drinking Water Quality Guidelines
- Public Health Act Camp Sanitation Regulations
- Public Health Act Water Supply Regulations
- Territorial Land Use Act and Regulations

You should consult the above document, guidelines, and legislation for compliance with existing regulatory requirements.

Nunavut
Department of Sustainable Development
ᐃᑯᐱᕐᐱᓕᕆᔨᒃᑯᑦ
Nongoliatoliginikot Havakviat
Ministère du Developpement Durable

February 24, 2004

Harvey Klatt
Sabina Resources Ltd.
309 Court Street S.
Thunder Bay, Ontario
P7B 2Y1

Dear Harvey,

RE: Areas of biological interest – Mineral Leases 2958, 2789, 2895, 3018, 3000, 2893, and 2964 (Your letter dated 18 February 2004)

Thank you for your information request on areas of biological interest in the identified Mineral Lease area. We regard information requests at this early stage of potential development as an important part of the process of determining potential impacts on the sustainable management of wildlife resources in Nunavut.

To address this request we conducted a broad information overview of the known wildlife resources within the region of the mineral leases, including a spatial query of our GIS database, and a summary of the known wildlife issues of the area. Details are provided below. Please note that due to the remote location of the lease area and the relative lack of ecological information on the area in general, this information should be regarded as a broad, non-exhaustive overview. Should your exploration activities lead to further development, we would expect a more detailed and exhaustive overview of the region. Additionally, we recommend that you contact the Nunavut Wildlife Management Board (NWMB), the Regional Wildlife Organization (RWO, Kitikmeot Hunters and Trappers Association, Kugluktuk) and the local HTO (Burnside HTO, Bathurst Inlet) for any additional information/areas of concern.

We are attaching an overview map to illustrate some of the known areas of wildlife interest in the region. [Note: to minimize the file size, we have reduced the image quality of the attached map. Should you require a more detailed map, please contact me and I will arrange to send you a higher resolution image.] This map provides some additional information to what you found on the SIDViewer web site, namely the location of an IBA site surrounding Bathurst Inlet, and predicted areas of raptor nesting habitat. The mineral leases are located within marginal raptor nesting habitat, but are outside of any known areas of wildlife significance.

Here is a non-exhaustive list of wildlife issues to consider:

Caribou — Although your camp and drilling sites will not be on the core caribou migration route (Bathurst and Ahiak Herds), there is a potential risk for a significant number of caribou to go through your area during the spring and/or fall migration. Your activities will take place slightly south of the southern boundary of the Bathurst Caribou Herd calving area (according to the 2002 delineation). Recent Bathurst Caribou herd estimate emphasizes the need to be cautious and to reduce negative effects (site/activity specific and cumulative impacts). Caribou is the staple food source for Inuit and other Aboriginal groups in the region. A number of sport hunts are also conducted on the Bathurst Caribou Herd. [Note that the calving ground of the Bathurst Caribou herd is not shown on the attached map].

Muskoxen — Information on this species is limited as Muskoxen surveys have not been conducted in this area for 15 years. However, muskoxen are of importance to local communities for subsistence and sport hunting.

Grizzly Bear — Grizzly Bear is a COSEWIC-listed species of "special concern." Particular efforts must me made to reduce potential conflicts with this species. Efforts must be made to ensure proper camp and drill site management to reduce attraction of wildlife (especially Grizzly Bear and Wolverine). Deterrence methods such as electric fences should be considered as well as other appropriate deterrent tools, and a wildlife encounter plan should be prepared (e.g., timing preventive actions, use of bangers, rubber bullets, plan of action, etc). If exploration activities continue through fall, denning areas should be avoided.

Wolverine — Wolverine is a COSEWIC-listed species of "special concern." As with Grizzly Bear, particular efforts must me made to reduce potential conflicts with this species. Efforts must be made to ensure proper camp and drill site management to reduce attraction of wildlife (especially Grizzly Bear and Wolverine). Deterrence methods such as electric fences should be considered as well as other appropriate deterrent tools, and a wildlife encounter plan should be prepared (e.g., timing preventive actions, use of bangers, rubber bullets, plan of action, etc). Exploration activities in the spring should avoid denning areas. Wolverine is an important species in Inuit tradition and local economy.

Wolves — Wolves are known to follow caribou during the migration and several dens may be present in the lease area. Efforts should be made to avoid denning areas during spring and early summer.

Foxes — Efforts should be made to reduce the attraction of wildlife to the site. Foxes are common carriers of rabies, and to maintain artificially high fox population densities (through anthropogenic food sources) may generate environmental and health issues.

Other mammals — If activities continue beyond the exploration stage, potential effects on other mammal species should be identified and addressed/mitigated.

Nesting Birds — Nesting sites should be identified and protected for all birds. Direction on identification and protection of migratory bird nests can be obtained from the Canadian Wildlife Service in Yellowknife or Iqaluit. The Government of Nunavut is particularly interested in the protection of raptor nest sites such as Peregrine Falcon, Gyrfalcon, Rough-legged Hawks, and Golden Eagles. The NWT/NU raptor nest database does not show any records of nests in the area. However, we expect that with further investigation, nest sites will be found. Should nests be located in areas of potential disturbance, please contact us for more information on protection measures.

Fishes and other aquatic wildlife — See RWO, HTO, NWMB, and Department of Fisheries and Oceans.

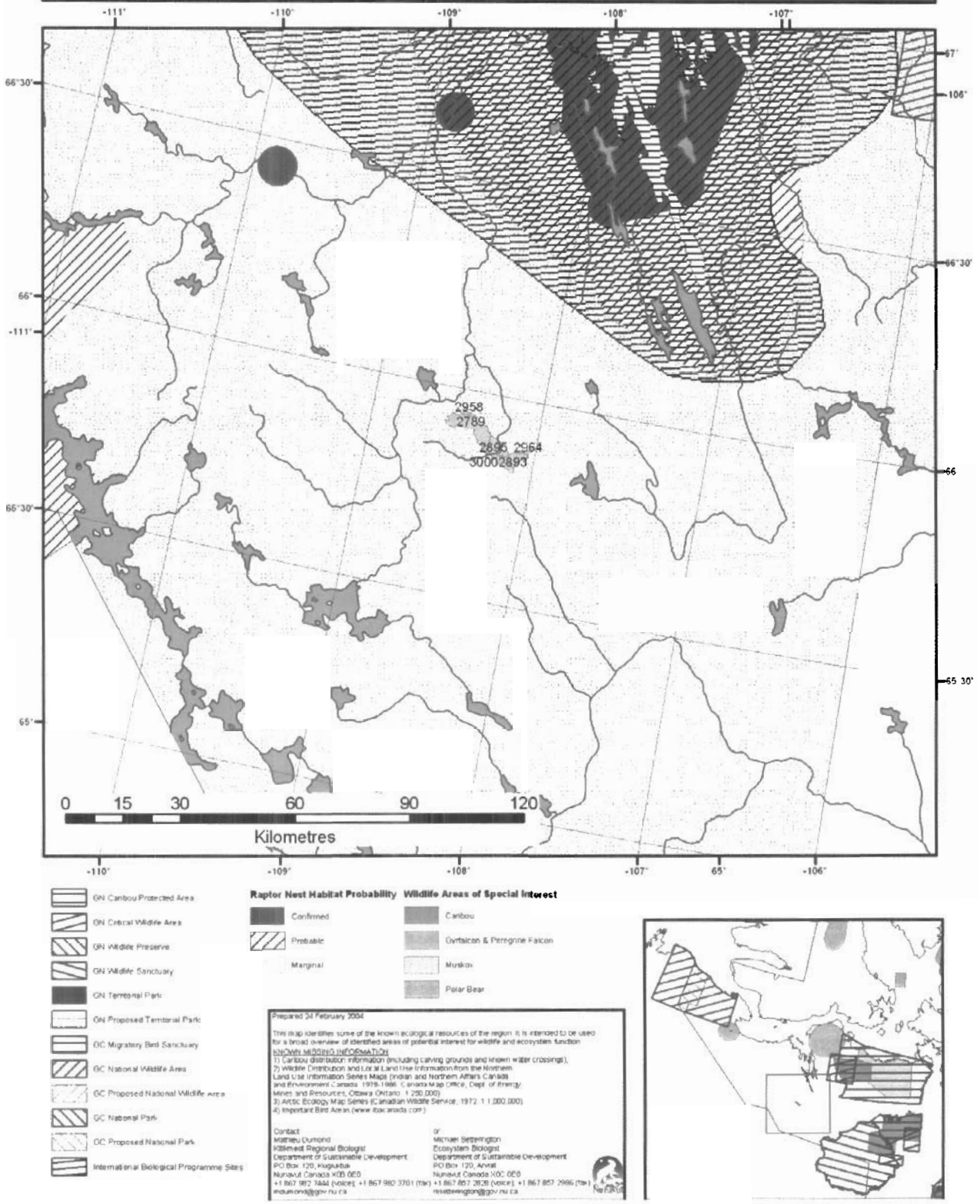
We hope that you will consider the above information in your exploration activities and recognize the importance of the protection of wildlife and habitat resources to Nunavummiut. We also hope that this information helps you with you application process, and we wish you the best in your exploration activities. We look forward to working with you further on wildlife and ecosystem investigations in the area.

Regards

Mathieu Dumond
Kitikmeot Wildlife Biologist
Department of Sustainable Development
Kugluktuk, NU X0B 0E0
Tel: (867) 982-7444 / Fax: (867) 982-3701

Cc: G. MacKay, Director, Environment and Integrated Resource Management
M. Setterington, Ecosystems Biologist
M. Angohiatok, Regional Manager of Wildlife (Kitikmeot)
S. Hannah, Regional Director (Kitikmeot)

Sabina Resources Overview



GN Caribou Protected Area
GN Critical Wildlife Area
GN Wildlife Preserve
GN Wildlife Sanctuary
GN Territorial Park
GN Proposed Territorial Park
GC Migratory Bird Sanctuary
GC National Wildlife Area
GC Proposed National Wildlife Area
GC National Park
GC Proposed National Park
International Biological Programme Sites

Raptor Nest Habitat Probability

Confirmed
Probable
Marginal

Wildlife Areas of Special Interest

Caribou
Gyrfalcon & Peregrine Falcon
Muskox
Polar Bear

Prepared 24 February 2004

This map identifies some of the known ecological resources of the region. It is intended to be used for a broad overview of identified areas of potential interest for wildlife and ecosystem function.

KNOWN MISSING INFORMATION
1) Caribou distribution information (including calving grounds and known winter crossings).
2) Wildlife Distribution and Local Land Use Information from the Northern Land Use Information Series Maps (Indian and Northern Affairs Canada and Environment Canada, 1978-1986, Canada Map Office, Dept. of Energy, Mines and Resources, Ottawa Ontario, 1:250,000)
3) Arctic Ecology Map Series (Canadian Wildlife Service, 1972, 1:1,000,000)
4) Important Bird Areas (www.ibacanada.com)

Contact:
Mathieu Dumond
Kitikmeot Regional Biologist
Department of Sustainable Development
PO Box 120, Kugluktuk
Nunavut Canada X0B 0E0
+1 867 982 7444 (voice), +1 867 982 3701 (fax)
mdumond@gov.nu.ca

or
Michael Setterington
Ecosystem Biologist
Department of Sustainable Development
PO Box 120, Arviat
Nunavut Canada X0C 0E0
+1 867 857 2828 (voice), +1 867 857 2986 (fax)
msetterington@gov.nu.ca